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10/755,812	01/12/2004	Hao Xue	291010-00475	3131

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ECKERT SEAMANS CHERIN & MELLOTT  
600 GRANT STREET  
44TH FLOOR  
PITTSBURGH, PA 15219

EXAMINER
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RAMAKRISHNAIAH, MELUR

ART UNIT	PAPER NUMBER
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2614

MAIL DATE	DELIVERY MODE
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04/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/755,812	<b>Applicant(s)</b> XUE ET AL.	
	<b>Examiner</b> Melur Ramakrishnaiah	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 29-33,35-41,43 and 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-33,35-41,43 and 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12-27-2007</u> .  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 29-33, 35-36, 37-41, 43-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For example amended independent claim 29 recites: where in the mobile data device gives preference to various ones of the plurality of system preference criteria to create the ranking of available networks. Regarding this limitation, Applicant's specification does not have support for this, especially mobile data device creating ranking of available networks. All available evidence in applicant's specification points to non-existence of mobile data device creating ranking of available networks. As can be seen from the specification: Each mobile device includes a preferred roaming list (PRL) built into it, which assists the device to perform system selection and acquisition (page 2 lines 5-9). Further only place applicant specification talks about rank is in page 6 lines 25-28 which says: The PRL then ranks the priority of each system. This clearly shows that PRL with rank has already built into it user preferences for selection of networks as described in table 1. This in no way supports applicant's amended claim limitation such as mobile data device creating ranking of available networks. Similar remarks apply to claim 37.

3. The amendment filed on 7-23-2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Addition of this at page 6, lines 25-27, viz: "The then current PRL list of preferred networks is considered together with the then available networks to derive a ranked list of available networks" constitutes new matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 29-30, 35, 37-38, 43, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aerrabotu et al. (US PAT: 6,993,336, filed 12-15-2003, hereinafter Aerrabotu) in view of Chiniga et al. (US PAT: 6,415,148, hereinafter Chiniga) and of Seppanen et al. (US PAT:5,903,832, hereinafter Seppanen).

Regarding claim 29, Aerrabotu discloses a method for mobile data device to determine a network to acquire based on a plurality of system preference criteria provided in a preferred roaming list on the mobile data device, the method comprising the steps of: waiting until a new network needs to be acquired, choosing the network to acquire at the mobile data device (reads on 102, figs. 1, 7) based on plurality of system

preference criteria stored on the mobile device, starting a search for the new network wherein mobile data device gives preference to various ones of the plurality of system preference criteria to select a network (col. 2, line 39 – col. 4, line 58).

Regarding claim 37, Aerrabotu discloses mobile data device for acquiring one of plurality of networks based on a plurality of system preference criteria provided in the preferred roaming list on the mobile data device, characterized by means for: waiting until a new network seems to be acquired, choosing the network to acquire at the mobile data device (reads on 102, figs. 1, 7) based on the plurality of system preference criteria stored in the mobile device, starting a search for the new network, wherein mobile data device gives preference to various ones of the plurality of system preference criteria to select a network (col. 2, line 39 – col. 4, line 58).

Aerrabotu differs from claims 29 and 27 in that it does not teach: the preference criteria including a list of service features the mobile device supports, and mobile device gives preference to various one of the plurality of system preferences criteria to create the ranking of the available networks.

However, Chiniga discloses system and method for the detection of service from alternate wireless communication system which teaches: mobile device gives preference to various one of the plurality of system preferences criteria to create the ranking of the available networks (col. 9 lines 6-50), and Seppanen discloses mobile terminal having enhanced system selection capability which teaches: storing prioritized list of all networks and selecting desired network to meet services capable of being handled by mobile terminal (abstract and claim 19) which reads on the preference

criteria including a list of service features the mobile device supports, and he also teaches: mobile device gives preference to various one of the plurality of system preferences criteria to create the ranking of the available networks (col. 5 lines 45-53)

Thus it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Aerrabotu's system to provide for the following: the preference criteria including a list of service features the mobile device supports as this arrangement would provide means for selecting and using networks to meet the desired user services such as data service or fax service as taught by Seppanen (col. 4 lines 38-52); mobile device gives preference to various one of the plurality of system preferences criteria to create the ranking of the available networks as this arrangement would provide means to select more desirable service provider to meet user needs as taught by Chiniga and Seppanen.

Regarding claims 30, 38, 44, Aerrabotu further teaches: plurality of system preference criteria includes geographic information and data capability information (col. 3 lines 36-63), the mobile data device includes means for storing the plurality of system preferences criteria in a table with the available networks (fig. 2, col. 3 lines 9-35).

Aerrabotu differs from claim 35 in that it does not teach: mobile data device stores a list of service features that mobile data device supports and plurality of system preference criteria includes a list of services the network supports.

However, Seppanen discloses mobile terminal having enhanced system selection capability which teaches: storing prioritized list of all networks and selecting

desired network to meet services capable of being handled by mobile terminal (abstract and claim 19).

Thus it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the Aerrabotu's system to provide for the following: mobile data device stores a list of service features that mobile data device supports and plurality of system preference criteria includes a list of services the network supports as this arrangement would provide means for selecting and using networks to meet desired user services such as data service or fax service etc as taught by Seppanen (col. 4 lines 38-52).

Claim 43 is rejected on the same basis as claim 35.

6. Claims 31-33, 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aerrabotu in view of Chiniga and Seppanen as applied to claims 30, 38 above, and further in view of Guilford et al. (US2002/0087674 A1, hereinafter Guilford).

The combination differs from claims 31-33, 39-41 in that it does not specifically teach: plurality of system criteria include information about whether each of the available networks support: data roaming for mobile data device, support mobile IP, always-on device.

However, Guilford discloses intelligent network selection based on quality of service and applications over different wireless networks which teach: plurality of system criteria include information about whether each of the available networks support: data roaming for mobile data device, support mobile IP, always-on device (paragraphs: 7-16; 21-23; 27-28; 45; 51-62; 66-67; 72-73, 79; figs. 2, 4, 7a).

Thus it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: plurality of system criteria include information about whether each of the available networks support: data roaming for mobile data device, support mobile IP, always-on device as this arrangement would provide the user to select required service based on his needs as taught by Guilford, thus providing means to meet user needs.

7. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aerrabotu in view of Chiniga and Seppanen as applied to claim 29 above, and further in view of Russell (US 2004/0249915).

The combination differs from claim 36 in that he does not teach the following: choosing step can find no networks are available.

However, Russell teaches the following: choosing step can find no networks are available (fig. 8, paragraph: 0096).

Thus it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: choosing step can find no networks are available as this arrangement would facilitates the user to learn the no network is available for connection as taught by Russell, so that user is not kept in darkness as to availability of the network.

### ***Response to Arguments***

#### **Rejection of claims 29-33, 35-41, and 43-44 under 35 U.S.C 112 first paragraph**

Regarding rejection of the claims under 35 U.S.C 112 first paragraph, applicant makes various arguments to create an illusion that applicants specification has support



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for the claim limitation: where in the mobile data device gives preference to various ones of the plurality of system preference criteria to create the ranking of available networks as recited in claim 29. He argues that "Initially, it is stated that the passage the Examiner cites states that PRL "ranks" the priority of each system. In this sentence, the word "ranks" is a transitive verb. A transitive verb indicates an action is performed by the subject of the verb and occurs to the object of the verb. In this sentence, the subject PRL and the object in the "priority of each system". thus, as properly read .. Therefore, it is clear that reference to the PRL, not only indicates the data therein, but also the functionality that one skilled in the art would apply to such data". Regarding this, according to applicant's specification PRL stands for Preferred Roaming List. As such it is neither a control device nor has any ability to provide the functionality to realize claim limitation: where in the mobile data device gives preference to various ones of the pluralities of system preference criteria to create the ranking of available networks as recited in claim 29. According to the above claim limitation, it is the mobile device that is creating ranking of available networks and not PRL doing it.

Applicant further refers to paragraphs [0027] and paragraph [0028] of his specification to argue that these paragraphs provide support for the above claim limitation. But a careful reading of these paragraphs does not support applicant's contention. Especially paragraph [0028] says the same thing such as The PRL ranks priority of each system. No way this could support claim limitation: where in the mobile data device gives preference to various ones of the pluralities of system preference criteria to create the ranking of available networks as recited in claim 29.

Applicant further invokes MPEP 2163 and makes various convoluted arguments to justify adding new matter to the specification and says it is to correct an obvious error and does not constitute new matter where one skilled in the art would not only recognize the existence of the error in the specification, but also recognizes appropriate correction, etc. Applicant thinks that there is an error in the specification and he can correct subsequently in an amendment. But 35 U.S.C 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. Therefore added material via amendment: "The then current PRL list preferred networks is considered together with the then available networks to derive a ranked list of available networks" constitutes new matter.

Applicant further argues that "the act of ranking various systems based upon a set of criteria is easily accomplished. it is further noted that those skilled in the art of connecting a mobile device to wireless systems would have sufficient knowledge to not attempt to connect to a system that is not available .. Writing the code "for such software is within the skill of the art, not requiring experimentation." Regarding this, Applicant is arguing as if examiner has made an argument that it is beyond the skill of anyone to do this. On the contrary, Examiner is asserting that applicant specification does not disclose support for his claim limitation such as: where in the mobile data device gives preference to various ones of the pluralities of system preference criteria to create the ranking of available networks as recited in claim 29.

In light of this, rejection of claims 29-33, 35-36, 37-41, 43-44 under 35 U.S.C 112 first paragraph is maintained.

Rejection of claims 29-30, 37-38, and 44 under 35 U.S.C 103(a) as being obvious over Aerrabotu et al. (US PAT: 6,993,336, filed 12-15-2003, hereinafter Aerrabotu) in view of Chiniga et al. (US PAT: 6,415,148, hereinafter Chiniga):

Regarding rejection of the claims and about Chiniga reference, Applicant argues that "It is noted that the ASL is based on the entire list of networks in a geographical area, and not on the networks that are available to the device. Accordingly, the Chiniga device and method will attempt to connect to a preferred network regardless of whether the network is actually available. Thus, this method wastes energy and ties up transmitter /receiver in multiple attempts to connect to network that may, or may not be available. Accordingly ... neither of these references discloses creating a ranking of available networks prior to connecting to the network". Regarding this, contrary to applicants interpretation of Chiniga reference, Chiniga clearly teaches the following: In another exemplary embodiment, the system acquisition processor will sort the data in ASL storage area 130 using the data in the MRU list storage area 124. That is, any data entries in the ASL storage area 132 that are also present in the MRU list storage area will be sorted according to their occurrence and position in the list storage area. In other words, all ASL entries with matching MRU entry are "bubbled up" to the top of the ASL and arranged according to their position in the MRU list (col. 9 lines 6-15). This clearly reads on creating a ranking of available networks prior to connecting to the network. In light of this, the combination of Aerrabotu in view of Chiniga clearly teaches applicant's claim limitations. In addition amended claims are rejected Aerrabotu in view of Chiniga and Seppanen and Seppanen also discloses mobile station 10 be capable of

dynamically ranking network types so that it may attempt registration based on subscriber defined preference order (col. 5 lines 45-53). This also reads on applicant's claim limitation: creating a ranking of available networks prior to connecting to the network as set forth in the office action above.

Regarding rejection of the claims, Applicant further argues that "The Examiner has not properly supported the rejection under 35 U.S.C 103(a) and under KSR international. In the office action, the Examiner has merely identified .. the Examiner has not "made explicit" the reason such references would, or could, be combined in the prior art". Regarding this, as stated in the office action, Examiner has clearly stated reason and rationale for combining the references. Examiner has clearly stated such an arrangement would provide means to select more desirable service provider to meet user service needs as taught by Chiniga which applicant is side tracking in his arguments for undermining the claim rejection based on combination of references.

Applicant makes further arguments in the same vein for combining the references which is addressed above.

Rejection of claims 31-33 and 39-41 under 35 U.S.C 103(a) as being obvious over Aerrabotu in view of Chiniga and Seppanen as applied to claims 30, 38 above, and further in view of Guilford et al. (US2002/0087674 A1, hereinafter Guilford): regarding rejection of these claims applicant refers to deficiencies of Aerrabotu and Chiniga as well as examiner's failure to properly support the rejection under 35 U.S.C 103(a) and under KSR international which have been addressed by the examiner as above and further argues that "The examiner asserts that "Guilford discloses ... The examiner

makes no other statement regarding Guilford and provides no other information as to how this reference could, or should, be combined with Aerrabotu in view of Chiniga. Applicants further note that Guilford fails to disclose creating a ranked list prior to connecting to the network". As already explained, the combination Aerrabotu in view of Chiniga and Seppanen clearly teaches creating a ranked list prior to connecting to the network and applicants argument regarding this is moot.

Regarding the rejection of the claims 31-33 and 39-41, Applicant further argues that "As set forth in above, under 35 U.S.C 103(a) and KSR international an Examiner must provide an "articulated reasoning with some rational underpinnings" sufficient to support the conclusion of obviousness and describe the "interrelated teachings of multiple patents; the effects of demands ..." . Regarding this, Examiner has clearly provided the reasons for combination Guilford with Aerrabotu in view of Chiniga and Seppanen and resulting advantage of the combination such as this arrangement would provide the user to select required service based on his needs as taught by Guilford, thus proving means to meet user needs which applicant is sidetracking in making arguments to undermine the rejection of the claims based on the above combination.

Rejection of claims 35 and 43 under 35 U.S.C 103(a) as being obvious over Aerrabotu in view of Chiniga and Seppanen: Regarding rejection of these claims applicant alleges that the Examiner has merely provided a summary sentence stating that ... ". Regarding this, Examiner has clearly provided the reason and rationale for combining the references such as this arrangement would provide means for selecting and using networks to meet desired user services such as data service or fax service

etc as taught by Seppanen (col. 4 lines 38-52) which Applicant has completely sidetracked to undermine the claim rejection based on the above combination.

Rejection of claim 36 under 35 U.S.C 103(a) as being obvious over Aerrabotu in view of Chiniga and Seppanen as applied to claim 29 above, and further in view of Russell (US 2004/0249915): regarding rejection of the claim Applicant alleges that "The Examiner has, again, merely identified a list of elements and stated that they may be combined. Such analysis is not sufficient to support a rejection under 35 U.S.C 103(a) and KSR international, as well as..." Regarding this, Examiner has clearly provided the reason and rationale for combining the references such as this arrangement would facilitates the user to learn the no network is available for connection as taught by Russell, so that user is not kept in darkness as to availability of the network which applicant has side tracked in making arguments to undermine the claim rejection based on the above combination.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melur Ramakrishnaiah/  
Primary Examiner, Art Unit 2614

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